# No Support for the Influence of Dispositional Greed on Coalition Bargaining Behavior

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April 2024

#### Abstract

By means of this master thesis I aim to contribute to the understanding of what drives payoff allocation in multi-party negotiation settings. Furthermore, I aim to contribute to the discussion of generalizability of previous results in two-party negotiation settings to multi-party negotiation settings. I examined the relationship between the bargainer's level of dispositional greed and their bargaining behavior in a multi-party negotiation setting. Specifically, I evaluated the relationship between the bargainer's level of dispositional greed and their proposed offer in a multi-party negotiation setting and the relationship between the bargainer's level of dispositional greed and their accepted offer in a multi-party negotiation setting. Additionally, I aimed to compare the strength of these two relationships. I made use of existing data provided by the LISS panel. The LISS panel is based on a true probability sample of Dutch households, drawn from the household register by Statistics Netherlands. The sample included 196 LISS panel participants. I performed two (multi)linear regression analyses to test the hypotheses. No relationship was found between the bargainer's level of dispositional greed and their proposed offer, nor between the bargainer's level of dispositional greed and their accepted offer in coalition bargaining. Hence, the strength of the relationships could not be compared. The results show significant differences with previous research in two-party negotiation settings, for which the generalizability of previous results in two-party negotiation settings to multi-party negotiation settings is questioned.

Keywords: Dispositional Greed; Bargaining Behavior; Multi-Party Negotiation; and Coalition Formation.

# Acknowledgements

Hereby I would like to thank Prof. dr. Ilja van Beest for the provided support in his role as supervisor throughout the entire master thesis process. Furthermore, I would like to thank the members of my master thesis cycle: Frederieke Hooghiemstra; Luuk Jonkers; and Zeynep Tataroğlu for their provided feedback. Moreover, I would like to thank Marije Oudejans M.Sc. of Centerdata for her assistance accessing the LISS Data Archive.

## No Support for the Influence of Dispositional Greed on Coalition Bargaining Behavior

Over the years, research has paid tremendous attention to bargaining behavior and accordingly, bargaining outcomes (Bazerman et al., 2000; De Dreu & Carnevale, 2003; Lewicki et al., 2006). Even so, bargaining research has primarily focused on two-party settings, disregarding multi-party settings where coalition formation is possible (Van Beest & Van Dijk, 2007). Improved understanding of coalition formation is of high importance, as coalition formation can be found at every level of society (Komorita, 1974; Ray & Vohra, 2015; Van Beest & Van Dijk, 2007).

Coalition formation occurs when a subset of a group agrees to cooperate by sharing resources to maximize their payoff (Gamson, 1964; Komorita & Chertkoff, 1973; Polzer et al., 1998; Thibaut & Kelley, 1959). More specifically, coalition bargaining occurs when (a) two or more parties are trying to maximize their share of the payoff; (b) no single alternative can maximize the payoff for all participants; (c) no one has initial resources adequate to control the decision alone; and (d) none of the participants should be included in every winning coalition (Gamson, 1961).

A central topic in coalition bargaining research has been the allocation of payoff. The allocation of payoff within coalition bargaining can be explained by various theories. According to the Minimum Resource Theory (Gamson, 1964), participants of coalition bargaining base their demanded payoff on the resources they would contribute to the coalition. Hence, participants often demand a payoff which is proportional to their resources (Van Beest & Van Dijk, 2007). Furthermore, the Minimum Power Theory (Gamson, 1964) suggests participants of coalition bargaining base their demanded payoff on the power they hold. In coalition bargaining, power is described as the chance of being included in a winning coalition. Thus, participants who own

relatively more power have an advantage in alternatives over others who own relatively less power (Komorita, 1974; Van Beest & Van Dijk, 2007). Moreover, the Bargaining Theory (Komorita & Chertkoff, 1973) suggests participants are prone to a self-serving bias. Meaning, participants demand a proportional share of the payoff when they have an advantage in resources, while they demand an equal share of the payoff when they have a disadvantage in resources (Van Beest & Van Dijk, 2007).

However, these theories omit the influence of personality on payoff allocation in coalition bargaining. Furthermore, these theories only acknowledge the role of the proposer of the offer, whilst also the recipient of the offer plays an important role. Naturally, it is the role of the recipient of the offer to either accept or reject the offer made by the proposer. Existing theories on payoff allocation in coalition bargaining assume payoff allocation is solely determined by the proposer of the offer, and not by both the proposer and the recipient of the offer. I determine the latter to be specified as the two-sidedness of the negotiation in payoff allocation norms. This failure to appreciate personality and the two-sidedness of the negotiation in the payoff allocation norms in coalition bargaining is surprising, as previous research on bargaining in two-party settings has shown that personality and the two-sidedness of the negotiation play a role in payoff allocation.

McCannon and Stevens (2017) examined how personality types influence payoff allocation in a two-party setting. First, participants' personality was assessed using the Myers-Briggs Type Indicator (MBTI; Myers, 1962). The MBTI contains separate indices for determining each of the four basic preferences which structure the individual's personality, being: (a) extraversion - introversion; (b) sensing - intuition; (c) thinking - feeling; (d) and judgment - perception.

After measuring the participants' personality, participants were asked to negotiate in a two-party setting. Specifically, Player A had an endowment of 100 units and had to decide how much to propose to Player B, keeping the remaining units to themself. Next, Player B had to choose whether to accept or reject the offer made by Player A. In case Player B rejected the offer, a counteroffer was made. However, the rejection destroyed 10 units, reducing Player A's number of units from 100 units to 90 units. Now, Player A had to choose whether to accept or reject the offer made by Player B. Each rejection reduced the wealth by 10 units but provided the opportunity to make a new offer. The negotiation ended when an offer was accepted or when 10 rejections were made. The results provided evidence for the relationship between personality and payoff allocation. A positive relationship was found between perceiving and payoff allocation.

In addition, the participants were asked to play an asymmetric information version of the game described above. At random, Player A was shown a card which stated either 80 units or 120 units to start with. Player B only knew the possible number of units and its probability distribution. Thus, in this version of the game, Player A and Player B had asymmetric information. The results provided evidence for an interaction effect between personality and information asymmetry (i.e., situational factor) when it comes to payoff allocation.

Furthermore, Seuntjens et al. (2015) evaluated the relationship between personality and payoff allocation within the two-party settings of the Dictator Game (Kahneman et al., 1986) and the Ultimatum Game (Güth et al., 1982) considering the two-sidedness of the negotiation.

Particularly, the study tested (a) the relationship between the bargainer's level of dispositional greed and their proposed offer in the Dictator Game; (b) the relationship between the bargainer's level of dispositional greed and their proposed offer in the Ultimatum Game; (c) and the

relationship between the bargainer's level of dispositional greed and their accepted offer in the Ultimatum Game.

Dispositional greed is defined as the desire to acquire more and the dissatisfaction of never having enough, independently of the situation. Dispositional greed was measured directly as personality characteristic using the 7-item Dispositional Greed Scale (DSG; Seuntjes et al., 2015), instead of indirectly based on behavior across situations. The Dictator Game is a one-shot bargaining game, in which the proposer (i.e., dictator) gets to make an offer which cannot be rejected by the recipient. The proposer is free to allocate as much of the payoff to oneself as one desires or choose for a more equal distribution of the payoff. The Ultimatum Game is a one-shot bargaining game, in which the recipient can choose to either accept or reject the offer made by the proposer. In case the recipient rejects the offer made by the proposer, both players receive nothing. If the recipient accepts the offer of the proposer, both players receive the payoff as allocated in the offer.

The study by Seuntjes et al. (2015) provided evidence for the negative relationship between the bargainer's level of dispositional greed and their proposed offer and the positive relationship between the bargainer's level of dispositional greed and their accepted offer in two-party settings. Note, like the proposed offer, the accepted offer was measured as monetary value (i.e., not 1 = accepted, 2 = not accepted). In other words, bargainers scoring relatively high on dispositional greed were more likely to propose and reject relatively low offers in both the Dictator Game and Ultimatum Game. Interestingly, the risk of an offer falling through in the Ultimatum Game did not reduce the influence of dispositional greed on the proposed offer. Thus, the risk of exclusion is inferior to the effect of dispositional greed on the proposed offer. Further noting, the study by Seuntjes et al. (2015) does not provide support for differences in the

influence of dispositional greed, depending on the type of bargaining behavior (proposed offer vs. accepted offer).

Taking into account the previous literature on two-party settings, it is important to note that in two-party settings all participating parties come to the same social outcome. The bargainers are either both included in the agreement, or both excluded from the agreement (i.e., no agreement). In multi-party settings, not all participating parties necessarily come to the same social outcome. Meaning, some bargainers might be included in the agreement, whereas others might be excluded from the agreement. Therefore, in multi-party settings more weight is assigned to the social component (i.e., inclusion vs. exclusion) of the negotiation (Van Beest & Van Dijk, 2007).

This difference in social context is illustrated by the bargainer's strength (e.g., resources). In two-party settings strong bargainers have more decision-making power, whereas in multiparty settings strong bargainers face the Strength-Is-Weakness effect (Caplow, 1956). Meaning, strong bargainers are often excluded from the coalition. Strong bargainers often demand a higher payoff compared to weak bargainers, which makes them less attractive as coalition partners. Besides, weak bargainers expect strong bargainers to demand large payoffs, for which weak bargainers often find each other to form coalitions (Wissink et al., 2022a). Thus, the effect of strength is different in two-party settings compared to multi-party settings. Hence, results from previous research in two-party settings cannot be generalized to multi-party settings.

In this master thesis I will examine the relationship between the coalition bargainer's level of dispositional greed and their coalition bargaining behavior. By examining this relationship, I contribute to the understanding of what drives payoff allocation in multi-party settings while taking into account the two-sidedness of the negotiation. Understanding of what

drives payoff allocation leads to improved efficiency in coalition bargaining, as coalition bargainers will take this into account while strategically choosing their coalition bargaining behavior (Van Veenen & Prakken, 2006). Particularly dispositional greed is seen as an interesting driver of payoff allocation, as it is recognized to be both a source of ambition and destruction (Seuntjes et al., 2015). Moreover, I will compare the effect of the bargainer's level of dispositional greed on bargaining behavior in two-party settings to the effect of the bargainer's level of dispositional greed on bargaining behavior in multi-party settings. This will contribute to the discussion of generalizability of previous results in two-party settings to multi-party settings.

So, by means of this master thesis, I take a step in filling up the identified literature gap concerning payoff allocation in coalition bargaining by examining the following research question: How does the coalition bargainer's level of dispositional greed affect their coalition bargaining behavior? I will answer this main research question through the following three sub questions:

- 1. How does the coalition bargainer's level of dispositional greed affect their proposed offer in coalition bargaining?
- 2. How does the coalition bargainer's level of dispositional greed affect their accepted offer in coalition bargaining?
- 3. How does the association between the coalition bargainer's level of dispositional greed and their proposed offer differ from the association between the coalition bargainer's level of dispositional greed and their accepted offer in coalition bargaining?

The study by Seuntjes et al. (2015) provided support for the negative relationship between the bargainer's level of dispositional greed and their proposed offer, and the positive

relationship between the bargainer's level of dispositional greed and their accepted offer (i.e., monetary value). As illustrated by the Strength-Is-Weakness effect, within multi-party settings more weight is assigned to the social component (i.e., inclusion vs. exclusion). However, according to Seuntjes et al. (2015), although more weight is assigned to the social component in the Ultimatum Game compared to the Dictator Game, the risk of exclusion in the Ultimatum Game did not reduce the influence of dispositional greed on the proposed offer, compared to the Dictator Game. Further noting, Seuntjes et al. (2015) provided no support for a difference in the influence of the bargainer's level of dispositional greed, depending on the type of bargaining behavior (offer proposed vs. offer accepted). Therefore, I hypothesize that:

- H1: The coalition bargainer's level of dispositional greed is negatively associated with their proposed offer in coalition bargaining.
- H2: The coalition bargainer's level of dispositional greed is positively associated with their accepted offer in coalition bargaining.
- H3: The association between the coalition bargainer's level of dispositional greed and their proposed offer is not significantly different from the association between the coalition bargainer's level of dispositional greed and their accepted offer in coalition bargaining.

The study by McCannon and Stevens (2017) provided support for the role of personality in payoff allocation. In addition, the study provided support for the interaction between personality and situational factors. Therefore, I will answer the research question(s) while using the Big Five as control variables to isolate a possible effect of the coalition bargainer's level of dispositional greed on coalition bargaining behavior. In other words, I will check if a possible

effect of the coalition bargainer's level of dispositional greed on coalition bargaining behavior is not already explained by other personality characteristics (i.e., the Big Five).

Thus, to test these hypotheses I will examine the relationship between the coalition bargainer's level of dispositional greed and their coalition bargaining behavior, while controlling for the Big Five. Moreover, I will compare the effect of the bargainer's level of dispositional greed on their bargaining behavior in two-party settings to the effect of the bargainer's level of dispositional greed on their bargaining behavior in multi-party settings. Considering the fragmented nature of literature on coalition bargaining, and the prevalence and influence of coalition formation in today's society, the current study provides valuable insights for both academics and practitioners.

#### Method

## **Longitudinal Internet studies for Social Sciences**

For this master thesis I have made use of existing data provided by the Longitudinal Internet studies for Social Sciences (LISS) panel. The LISS panel exists since 2007 and is managed by the non-profit research institute Centerdata (Tilburg University, the Netherlands). The LISS panel is based on a true probability sample of Dutch households, drawn from the household register by Statistics Netherlands. The LISS panel consists of 5,000 households, compromising approximately 7,500 individuals aged 16 years and over. Participation is only possible through invitation. Households which could otherwise not participate are provided with an internet connection and computer.

Every month, participants in the LISS panel complete online surveys with a total duration of 60 minutes and receive monetary compensation of 5 euros for each completed survey. Part of the available time is reserved for LISS Core Studies (e.g., personality). The LISS Core Studies

are repeated annually and designed to follow changes over the life course. Today, 340 studies are available in the data archive, including one background study (i.e., participants' demographics) and 11 LISS Core Studies. Data collection ranges from 2007 to the present. Usually, studies become available in the data archive six months after data collection has taken place.

All participants from the LISS panel were approached in traditional ways (i.e., by letter, followed by telephone call and/or house visit). Individuals who have indicated their agreement to participate receive a confirmation by email and a letter with a web address and login code. By using the provided code, the individual can confirm their participation and immediately start the first survey. This is the background study. At the end of the background study, the individual is asked to provide their informed consent. It is not until the individual has provided their informed consent; the individual becomes a LISS panel participant.

Every two years, a fresh sample is drawn from the Dutch household population by Statistics Netherlands to address attrition from the original and subsequent samples. Household attrition is about 10% per year, and individual participant attrition is about 12% a year. In 2023, the panel was refreshed for the seventh time, using stratified sampling. Around 80% of the eligible participants participate in the panel. Monthly response rates vary between 50% and 80%, depending on the studies and month.

The LISS panel can be used by every researcher or policy maker through a paid assignment. Both the scientific quality and long-term relationship with the panel is highly valued by the organization. Therefore, questions should be comprehensible (i.e., B1 language level), and should not be offensive or culturally inappropriate to any group. Depending on the required sample, the entire LISS panel, a random subsample or a specific target group can be selected to participate in a study. Researchers are advised to avoid exceeding 10 to 15 minutes survey time,

as much as possible. However, no absolute time limit exists regarding survey length. Aside from the review conducted by an external ethics committee (i.e., ethics committee of the home institution of the researcher), Centerdata reviews each survey focusing on both language and content (Centerdata, 2024).

### **Data Search**

I searched the LISS Data Archive using the following keywords: (a) 'greed'; (b) 'bargain-'; (c) 'negotiat-'; (d) 'game'; (e) 'economic'; (f) 'personality'. This initial search provided me with the LISS panel data for dispositional greed and personality.

I had to use various other search technique to obtain data on coalition bargaining behavior. First, a list of all studies (i.e., 10) including an economic game or lottery setting was provided by Centerdata. None of these studies used two-party or multi-party bargaining settings. Second, the LISS Data Archive provides lists of available topics and concepts. Using AI, I identified the topics and concepts that are related to 'bargaining' or 'negotiating'. I screened the list of related studies by means of the codebook. None of these studies used two-party or multi-party bargaining settings. However, not all data has been published in the LISS Data Archive yet. As stated earlier, it takes up to six months after data collection before data will be available in the LISS Data Archive. Therefore, I used a third search method. By means of Google Scholar, I searched for studies regarding bargaining behavior completed by LISS panel participants. Again, I found no relevant studies. Nonetheless, through my supervisor, I was able to obtain data on coalition bargaining behavior, which is yet to be published in the LISS Data Archive.

# The Sample

To obtain the sample, I merged four existing LISS panel data sets. The first data set by Seuntjes et al. (2019) included data on the level of dispositional greed of the participants. The

start date for the study was 06-05-2019 and the study ended at 28-05-2019. For participating in this study, LISS panel participants received the standard monetary compensation of 5 euros for completing a survey. The second data set by Cantiani et al. (2023) included data on offer proposed and offer accepted in coalition bargaining. The start date for the study was 18-07-2022 and the study ended at 02-08-2022. For participating in this study, LISS panel participants received the standard monetary compensation of 5 euros for completing a survey. Additionally, the participants received ~0.55 cents per 1000 euros they attained during the game, resulting in a total payout between 5 and 10 euros. The third data set LISS Core Study 7 - Personality Wave 14 by Centerdata, included the data on personality of the participants. The start date for the study was 02-05-2022 and the study ended at 28-06-2022. For participating in the LISS Core Study 7 - Personality, LISS panel participants received the standard monetary compensation of 5 euros for completing a survey.

Although more recent data on personality of the LISS panel exists, I have consciously chosen LISS Core Study 7 - Personality Wave 14. Firstly, by using Wave 14 instead of Wave 15 the data provides information on the personality of the LISS panel participants only one month before their coalition bargaining behavior was measured. Therefore, the effect of time on personality is negligible. Secondly, by using Wave 14 over Wave 15, the overlapping sample between the datasets is larger. The fourth data set LISS Background, included the data on the demographics of the participants. The LISS Background study is the first survey completed by participants, to become a LISS panel participant. LISS panel participants received the standard monetary compensation of 5 euros for completing a survey. Please note that response details for each individual study can be found in Appendix B.

Integrating the samples resulted in a final overlapping sample of 196 LISS panel participants. The LISS panel participants in the sample are aged between 16 and 82 years old (M = 51.71, SD = 16.06). Furthermore, 49.7% of the participants in the sample identified as male, and 50.3% identified as female.

I performed a priori power analysis using the 27th version of IBM SPSS Statistics. The results indicated a required sample size of 191, to correctly test one hypothesis (r = .2, power = .8,  $\alpha = .05$ ; Ferguson, 2009). However, since multiple hypotheses would be tested, I applied a Bonferroni correction to the priori power analysis (i.e.,  $\alpha = .05/n$ ; Goldman, 2008). Please note that I applied the Bonferroni correction based on two tests, as no new test would be run for Hypothesis 3. The results indicated a required sample size of 231, to correctly test the hypotheses (r = .2, power = .8,  $\alpha = .025$ ). Hence, the sample size of n = 196 was sufficient to correctly test Hypothesis 1. However, testing Hypothesis 2 and Hypothesis 3 should be considered exploratory.

In addition to the ethical approval provided for each original study completed by the LISS panel and the review of Centerdata, the Ethics Review Board of Tilburg University provided ethical approval for the present study. The official statement can be found in Appendix A.

#### **Materials**

Cantiani et al. (2023) registered the proposed offers and the accepted offers during the Transport Game (TG; Cantiani et al., 2023). The TG is a simple weighted majority game, which simulates coalition bargaining in a transport setting. Cantiani et al. (2023) programmed the TG in the open-source software oTree (Chen et al., 2016) using the Online Coalition Game (Wissink et al., 2022b).

Within the TG, each player takes on the role of a transport company who transport their goods from Amsterdam to Paris. Players are informed that each company differs in size, and usually uses a truck just big enough to transport their cargo. Company A is known to be a large-size company that normally uses a truck that carries 4 tons of goods. Company B is known to be a medium-size company that normally uses a truck that carries 3 tons of goods, and company C is known to be a small-sized company that normally uses a truck that carries 2 tons of goods.

Furthermore, players are informed that there is a big truck available that can carry up to 9 tons of cargo, and that the companies can bundle their cargo in that truck. However, this specific type of truck may only be used in case it is carrying at least 5 tons. Thus, a coalition of at least two companies needs to be formed to use the large truck. In addition, players are informed that another company needs the large truck to ship goods from Paris to Amsterdam. The company offers a premium of  $\[mathbb{e}\]$ 9.000 if the big truck arrives in Paris. Therefore, any combination of companies that can offer at least 5 tons of cargo could use the large truck and claim the  $\[mathbb{e}\]$ 9.000 bonus.

The TG consists of three phases. First, the players are asked to indicate which coalition they would like to form (i.e., AB, AC, BC, or ABC-coalition), and how they propose to distribute the €9.000 among the coalition members. Second, the players will be presented with all offers made in the first phase and will be asked to select the offer they prefer. Any proposal that includes themselves can be chosen. Third, the players will be shown who selected which proposal. If all coalition members included in a proposal have selected the same offer, a coalition will be formed, and the negotiation is terminated. Otherwise, no coalition is formed, and a new round of negotiation needs to take place. This process is repeated until a coalition is formed or after 20 rounds of negotiations.

#### Measures

# Dispositional Greed

Dispositional Greed was assessed using the 7-item Dispositional Greed Scale (DGS) by Seuntjes et al. (2015). According to Seuntjes et al. (2015) and Mussel et al. (2018) the DGS shows acceptable levels of internal consistency (i.e., internal consistency > .30; Nunnally & Bernstein, 1994) and test-retest reliability (test-retest reliability > .6; Hulin et al., 2001). Within my sample, I measured the reliability to be .88 (i.e., Chronbach's alpha). This will be discussed into more detail in the results section. Furthermore, Seuntjes et al. (2015) and Mussel et al. (2018) evaluated the construct validity, discriminant validity and predictive validity to be solid. Hence, the DGS is a suited measure to investigate the construct of dispositional greed in relation to economic behavior (Mussel et al., 2018).

Within the DGS, the participant was asked to judge the 7 statements by the use of a 5-point Likert scale (1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree). For example: 'It doesn't matter how much I have. I'm never completely satisfied.' The full 7-item version of the DGS can be found in Appendix C.

# Offer Proposed

Offer Proposed was measured as the proportion of the total available payoff a bargainer proposed for themself in the opening offer. Please note that I only examined opening offers, to reduce the risk of confounding variables. Meaning, I only examined opening offers, as subsequent proposals are most likely influenced by other factors (e.g., the counteroffer made).

# Offer Accepted

After proposing an offer, all bargainers were shown all proposed offers. Then, the bargainer was asked to select the offer they would like to execute. They could select any offer in

which they were included. An offer was considered accepted when all coalition members included in a proposal had selected the same offer. Only accepted offers were examined. Offer Accepted was measured as the proportion of the total available payoff selected to execute in the opening offer. An alternative measure could have been the level of offer acceptance (i.e., 1 = accepted, 2 = not accepted). However, this would not provide any insight on the value of the offers, for which comparison between the association of Dispositional Greed and Offer Proposed and the association of Dispositional Greed and Offer Accepted would be less valuable. Furthermore, I would like to compare the results of my thesis to the previous results by Seuntjes et al. (2015), who also measured the accepted offer as monetary value. Please note, just like for Offer Proposed, I only examined opening offers to reduce the risk of confounding variables.

# **Personality**

Personality was measured using the IPIP Big Five Inventory (IPIP BFI) by Goldberg (1999). According to Ypofanti et al. (2015) the IPIP BFI shows a substantial level of internal consistency (i.e., internal consistency > .30; Nunnally & Bernstein, 1994), but a questionable level of test-retest reliability (test-retest reliability > .6; Hulin et al., 2001). Within my sample, I measured the reliability to range between .72 and .91 (i.e., Cronbach's alphas). This will be discussed into more detail in the results section. In addition, the construct validity was illustrated by the clear one-to-one relations between all five factors in the IPIP BFI and the Ten Item Personality Measure (Ypofanti et al. 2015).

Within the IPIP BFI, the participant was asked to judge 50 statements by the use of a 5-point Likert scale (1 = very inaccurate, 2 = moderately inaccurate, 3 = Neither inaccurate nor accurate, 4 = moderately accurate, 5 = somewhat accurate). For example: 'I am the life of the party.' The full 50-item IPIP BFI can be found in Appendix C.

#### **Procedure**

For all three individual studies, participants of the LISS panel were invited via monthly email to participate in the studies. The invitation email concerning the study by Seuntjes et al. (2019) and the LISS Core Study 7 - Personality, simply included a link which would lead the participant directly to the online survey. Informed consent was already provided when becoming a participant of the LISS panel. Both surveys were administered in Dutch, and all questions had to be answered to complete the surveys. A reminder to fill out the survey was sent twice to non-respondents.

For the study by Cantiani et al. (2023), LISS panel participants indicated via the link in the invitation email their participation in the study. After registration, participants were assigned to a specific date and time slot to participate in the study. When the participant joined the study at the assigned time slot, they were informed the study involved a real-time interaction with other participants. Therefore, additional informed consent had to be provided before participating in the study.

When the informed consent was provided, participants were informed some pages had timers to prevent them to spend more than 5 minutes to complete a page. In case they would fail to complete the page within the time limit, the study would be terminated for the whole triad. This would imply all participants would only receive the base payment. Next, participants were presented with the general instructions of the TG as described earlier. Then, each participant was grouped into a triad based on their arrival order, randomly assigned to a company (i.e., A, B or C), and informed about the negotiation phases. After completion of the study, the participants were quizzed on their comprehension of the TG and debriefed on the purpose of the study.

## **Statistical Analyses**

To analyze the data, I used the 27th version of IBM SPSS. I pre-registered the study via AsPredicted. The pre-registration can be found in Appendix A. Dispositional Greed was the independent variable and Offer Proposed and Offer Accepted were the dependent variables. I used the Big Five as control variables. In the pre-registration, I denoted outliers as - 3 > Z-score > 3 (Seo, 2006). Based on the Z-scores, I did not identify any outliers nor did the missing data exceed 10%. Hence, I could remain all participants in the sample (Aguinis et al., 2013; Madley-Dowd et al., 2019).

I computed the descriptive statistics and correlations of the variables of interest.

Furthermore, as stated earlier, I examined the internal reliability of the scales used by means of Cronbach's alpha and inter-item correlations. Then, I performed two (multi)linear regression analyses to test the hypotheses. Performing (multi)linear regression analyses is the most appropriate method, considering the correlational research design. When performing a (multi)linear regression analysis the following assumptions should be met: (1) independence; (2) normality; (3) homoscedasticity; (4) linearity; (5) no multicollinearity. I performed preliminary analyses to check if each assumption had been satisfied. The assumption of independence, normality, homoscedasticity, and multicollinearity were satisfied. The assumption of linearity was not satisfied, however non-linear relationships were ruled out based on the scatterplots.

Please note that all plots concerning the assumption checks can be found in Appendix D.

#### Results

# **Descriptive Statistics**

The descriptive statistics, correlation coefficients, Cronbach's alpha and inter-item correlation coefficient of each variable are reported in Table 1. A scale's reliability is preferred

to be at least .80 (Pallant, 2016). Nonetheless, Cronbach's alpha values are relatively sensitive to the number of items in the scale. Hence, Cronbach's alpha values around .50 are often reported for short scales (i.e., 10 items or less; Pallant, 2016). Therefore, it is considered appropriate to report both Cronbach's alpha and the inter-item correlation coefficient for shorter scales. The inter-item correlation coefficient should ideally range between .20 and .40 (Pallant, 2016).

The scales of Dispositional Greed, Conscientiousness and Neuroticism are considered reliable, based on the value of Cronbach's alpha (see Table 1). The scales of Openness, Extraversion and Agreeableness are not considered reliable based on the value of Cronbach's alpha. Nevertheless, the inter-item correlation coefficients show sufficient reliability for Extraversion and Agreeableness (see Table 1). Please note that the reliability of Openness remains debatable, which I will take into account in my discussion.

Furthermore, the correlation coefficient between an independent variable and a dependent variable is preferred to be at least .30 (Pallant, 2016). Dispositional Greed is not significantly correlated with Offer Proposed nor Offer Accepted. Moreover, none of the control variables are significantly correlated with Offer Proposed or Offer Accepted. Further noting, Offer Proposed and Offer Accepted are significantly correlated. This is not surprising, since bargainers often select (the option close to) their own offer to execute when presented with all possible offers.

In addition, careful consideration of the data indicated a strong influence of the bargainer's resources on the proposed offer and the accepted offer. The unequal distribution of resources at the start of the TG influenced Offer Proposed and Offer Accepted, as bargainers often demand a payoff which is proportional to their resources (i.e., Minimum Resource Theory; Gamson, 1961; Komorita & Chertkoff, 1973; Van Beest & Van Dijk, 2007).

Therefore, I proceeded with the statistical analyses while controlling for the unequal distribution of resources and the Big Five. The distribution of resources was as follows: (a) Player A owned four resources; (b) Player B owned three resources; (c) Player C owned two resources. Please note that the control variable Player was not specified in the pre-registration but has been added after the data had been accessed.

 Table 1

 Descriptive Statistics, Correlations, Cronbach's alpha, and Inter-Item Correlations

	Variable	M	SD	1	2	3	4	5	6	7	8	9	a	Inter-Item Correlation
1.	Dispositional Greed	14.13	4.85	-									.88	.53
2.	Openness	35.63	4.92	.1	-								.73	.14
3.	Conscientiousness	37.42	5.37	21**	.29**	-							.82	.30
4.	Extraversion	32.41	5.31	07	.29**	.14	-						.75	.23
5.	Agreeableness	36.41	4.85	39**	.24**	.35**	.38**	-					.72	.20
6.	Neuroticism	24.53	7.59	.20**	25**	31**	27**	08	-				.91	.50
7.	Player	1.94	.80	.01	.02	05	10	08	05	-			N.A.	N.A.
8.	Offer Proposed	48.58	15.41	06	.06	.11	.07	.11	03	58**	-		N.A.	N.A.
9.	Offer Accepted	48.12	10.80	.02	.26	.05	.14	.02	.06	40**	.74**	-	N.A.	N.A.

Note. N = 196. Except for Offer Accepted N = 42. \* p < .05 \*\* p < .01

# **Hypothesis 1**

The results of the (multi)linear regression analyses, testing Hypothesis 1, are presented in Table 2.A. and Table 2.B. I hypothesized that the coalition bargainer's level of dispositional greed would be negatively associated with their proposed offer in coalition bargaining, when controlled for the Big Five. Dispositional Greed explains 0% of the variance in Offer Proposed. When controlled for the Big Five and Player the model explains 34% of the variance in Offer Proposed. Player is the only significant predictor in the model. Thus, a significant relationship exists between Player and Offer Proposed. However, no significant relationship exists between Dispositional Greed and Offer Proposed. Hence, Hypothesis 1 was not supported.

Table 2.A.

Analysis 1

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Constant	.01	.08		.00	.00
Dispositional Greed	06	.07	06		

Note. N = 196. The linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

Table 2.B.

Analysis 2

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Constant	.01	.06		.36	.34
Dispositional Greed	03	.07	03		
Openness	.04	.07	.04		
Conscientiousness	.04	.07	.04		
Extraversion	03	.07	03		
Agreeableness	.04	.08	.03		

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Neuroticism	03	.07	03		
Player	61**	.06	59		

Note. N = 196. The (multi)linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

In addition, I ran another (multi)linear regression analysis to test for an interaction effect between Dispositional Greed and Player. Please note that this analysis was not recorded in the pre-registration. The results of this (multi)linear regression analysis are presented in Table 2.C. The regression coefficient for the interaction term Dispositional Greed \* Player was insignificant. Hence, no interaction effect was observed.

Table 2.C.

Analysis 3

Regression	В	SE B	Beta	$R^2$	Adjusted $R^2$
Constant	.01	.06		.36	.33
Dispositional Greed	03	.07	03		
Openness	.04	.07	.04		
Conscientiousness	.04	.07	.04		
Extraversion	03	.07	03		
Agreeableness	.03	.08	.03		
Neuroticism	03	.07	03		
Player	61	.06	59		
Dispositional Greed * Player	.02	.06	.02		

Note. N = 196. The (multi)linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

## **Hypothesis 2**

The results of the (multi)linear regression analyses, testing Hypothesis 2, are presented in Table 3.A. and Table 3.B. I hypothesized that the coalition bargainer's level of dispositional

greed would be positively associated with their accepted offer in coalition bargaining, when controlled for the Big Five. Dispositional Greed explains 4% of the variance in Offer Accepted. When controlled for the Big Five and Player the model explains 3% of the variance in Offer Accepted. No significant predictors are present in the model. Thus, no significant relationship exists between Dispositional Greed and Offer Accepted. Hence, Hypothesis 2 was not supported.

Table 3.A.

Analysis 4

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Constant	.70	.11		.08	.04
Dispositional Greed	15	.10	29		

Note. N = 42. The linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

Table 3.B.

Analysis 5

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Constant	.71	.14		.32	.03
Dispositional Greed	09	.16	17		
Openness	.10	.17	.16		
Conscientiousness	.13	.14	.23		
Extraversion	12	.17	21		
Agreeableness	19	.17	31		
Neuroticism	15	.21	22		
Player	10	.21	12		

Note. N = 42. The (multi)linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

In addition, likewise for Hypothesis 1, I ran another (multi)linear regression analysis to test for an interaction effect between Dispositional Greed and Player. Please note that this analysis was not recorded in the pre-registration. The results of this (multi)linear regression analysis are presented in Table 3.C. The regression coefficient for the interaction term Dispositional Greed \* Player was insignificant. Hence, no interaction effect was observed.

Table 3.C.

Analysis 6

Regression	В	SE B	Beta	$R^2$	Adjusted $R^2$
Constant	.72	.15		.32	04
Dispositional Greed	08	.20	15		
Openness	.11	.18	.16		
Conscientiousness	.13	.15	.23		
Extraversion	12	.17	21		
Agreeableness	19	.17	31		
Neuroticism	15	.22	23		
Player	10	.22	12		
Dispositional Greed * Player	02	.17	03		

Note. N = 42. The (multi)linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

# **Hypothesis 3**

I hypothesized that the association between the coalition bargainer's level of dispositional greed and their proposed offer is not significantly different from the association between the coalition bargainer's level of dispositional greed and their accepted offer in coalition bargaining. I was unable to test this hypothesis, since no association was found between the bargainer's level of dispositional greed and their proposed offer (Hypothesis 1), and no association was found

between the bargainer's level of dispositional greed and their accepted offer (Hypothesis 2). Hence, Hypothesis 3 was not supported.

Nevertheless, for completeness, the results of analysis 2 and analysis 4 that would have been relevant for testing Hypothesis 3 are presented in Table 4. The results indicate that the 95% confidence interval of the Beta concerning Dispositional Greed on Offer Proposed overlaps the 95% confidence interval of the Beta concerning Dispositional Greed on Offer Accepted. Thus, the results are not significantly different.

Table 4

Comparison of Standardized Beta Coefficients

	Beta	95% CI for Beta	Lower Bound	Upper Bound
Dispositional Greed on Offer Proposed	03		42	.67
Dispositional Greed on Offer Accepted	15		40	.70

Note. N = 196. Except for Offer Accepted N = 42. The (multi)linear regression analyses were performed using the centered variables. \* p < .05 \*\* p < .01

## **Exploratory Analyses**

For the purpose of this master thesis, I merged four data sets from the LISS Data Archive. As a consequence, my study did not have enough statistical power to correctly test all three hypotheses. The issue at hand was the overlapping sample between the study by Seuntjes et al. (2019) and the study by Cantiani et al. (2023). Therefore, I (partly) addressed the issue of statistical power by running exploratory (multi)linear regression analyses, which examine the effect of personality on coalition bargaining behavior.

The results of these exploratory (multi)linear regression analyses, are presented in Table 5.A. and Table 5.B. The Big Five combined with Player explain 31% of the variance in Offer Proposed. Conscientiousness and Player were the only significant predictors in the model.

Further noting, the Big Five combined with Player explain 23% of the variance in Offer Accepted. Player was the only significant predictor in the model.

**Table 5.A.** *Analysis 7* 

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Constant	1.37	.09		.32	.31
Openness	01	.04	01		
Conscientiousness	.08	.04	.08*		
Extraversion	03	.04	03		
Agreeableness	03	.04	03		
Neuroticism	02	.04	02		
Player	69	.04	56**		

Note. N = 640. The (multi)linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

Table 5.B.

Analysis 8

Regression	В	SE B	Beta	$R^2$	Adjusted R <sup>2</sup>
Constant	1.35	.19		.26	.23
Openness	.08	.07	.10		
Conscientiousness	.02	.06	.02		
Extraversion	.01	.06	.01		
Agreeableness	.00	.07	01		
Neuroticism	.01	.06	.01		
Player	53	.08	50**		

Note. N = 171. The (multi)linear regression analysis was performed using the centered variables.  $R^2$  is the proportion of variance in the dependent variable explained by the independent variable(s). \* p < .05 \*\* p < .01

#### Discussion

## Summary

In this master thesis I examined the relationship between the bargainer's level of dispositional greed and their coalition bargaining behavior. More specifically, I evaluated the association between the bargainer's level of dispositional greed and their proposed offer in coalition bargaining and the association between the bargainer's level of dispositional greed and their accepted offer in coalition bargaining, while controlling for the Big Five and the player's position in the TG. Furthermore, I tested for an interaction effect between dispositional greed and the player's position in the TG. Additionally, it was my aim to compare the association of the bargainer's level of dispositional greed and their proposed offer to the association of the bargainer's level of dispositional greed and their accepted offer in coalition bargaining.

As presented in the results section, the bargainer's level of dispositional greed was not related to their proposed offer in coalition bargaining. Furthermore, the bargainer's level of dispositional greed was not related to their accepted offer in coalition bargaining. Besides, it should be noted that the Big Five was not significantly related to offer proposed nor offer accepted. In addition, after careful consideration of the data, the variable Player was added to control for the player's position (i.e., resources) in the TG. A positive relationship was found between the player's resources and Offer Proposed. No relationship was found between Player and Offer Accepted. Besides, no interaction effect was observed for Dispositional Greed and Player. Moreover, the difference between the association of the bargainer's level of dispositional greed and their proposed offer and the association of the bargainer's level of dispositional greed and their accepted offer in coalition bargaining could not be tested. These findings suggest significant differences with previous research (Cantiani et al., 2023; McCannon and Stevens,

2017; Seuntjes et al., 2015), as the bargainer's level of dispositional greed and their personality had no effect on their bargaining behavior. These results are discussed below into more detail.

# **Hypothesis 1**

In Hypothesis 1, I hypothesized that the bargainer's level of dispositional greed would be negatively associated with their proposed offer when controlling for the Big Five. In addition, I also controlled for the player's position in the TG. No significant relationship was observed between Dispositional Greed and Offer Proposed. Furthermore, no significant relationship was observed between the Big Five and Offer Proposed. Moreover, a significant relationship was observed between Player and Offer Proposed. Further noting, no interaction effect was observed for Dispositional Greed and Player.

Although Seuntjes et al. (2015) stated the influence of dispositional greed on bargaining behavior was not reduced by the risk of exclusion in the Ultimatum Game compared to the Dictator Game (i.e., two-part settings), this could be a possible explanation for the insignificant relationship between the bargainer's level of dispositional greed and their proposed offer in coalition bargaining. In coalition bargaining, not all bargainers necessarily reach the same social outcome (i.e., inclusion vs. exclusion). Coalition bargainers assign more weight to the social component of the negotiation compared to bargainers in two-party settings (Van Beest & Van Dijk, 2007). Hence, regardless of their level of dispositional greed, bargainers might base their desired payoff solely on their resources, as they do not want to increase the risk of being excluded from the winning coalition by demanding a disproportionate payoff. In other words, the need to belong might override the urge to always want more (i.e., dispositional greed). Thus, the changes in situation (i.e., two-party vs. multi-party), may explain the results of the present study.

Another possible explanation could be the statistical power of the test. The study by Seuntjes at al. (2015) used a sample of N = 302, compared to N = 196. This explanation could not be verified, since the maximum overlapping sample for the bargainer's level of dispositional greed and coalition bargaining behavior was N = 196, regardless of the control variables.

Further noting, previous research by McCannon and Stevens (2017) and Cantiani et al. (2023) has provided support for the influence of personality on bargaining behavior. McCannon and Stevens (2017) provided evidence for the positive relationship between perceiving and payoff allocation and Cantiani et al. (2023) provided evidence for the positive relationship between perspective-taking and inclusion in a winning coalition. The difference between previous research and the present study could be explained by the variance in measurement. McCannon and Stevens (2017) used the MBTI and Cantiani et al. (2023) used perspective-taking, as opposed to the Big Five. Furthermore, McCannon and Stevens (2017) and Cantiani et al. (2023) measured bargaining behavior outcomes (i.e., final payoff and inclusion in winning coalition) in contrast to bargaining behavior (i.e., offer proposed and offer accepted).

Again, another possible explanation could be the statistical power of the test. The study by McCannon and Stevens (2017) used a sample of N = 205 and the study by Cantiani et al. (2023) used a sample of N = 640, compared to N = 196. This explanation could be verified, since I used (part of) the data set by Cantiani et al. (2023). Based on the exploratory analysis ran, it is validated that statistical power is an explanation for the contradiction in findings.

Besides the Big Five, the control variable Player was added to the model. The data clearly illustrated the effect of the Minimum Resource Theory, which explains that coalition bargainers base their desired payoff on the resources they would contribute to the coalition. Hence, the control variable Player did have a significant relationship with Offer Proposed.

Additionally, it was examined whether an interaction effect between Dispositional Greed and Player would be present. No interaction effect was observed. This is consistent with the literature, since dispositional greed is defined as the desire to acquire more and the dissatisfaction of never having enough independently of the situation (e.g., resources; Seuntjes et al., 2015).

# **Hypothesis 2**

In Hypothesis 2, I hypothesized that the bargainer's level of dispositional greed would be positively associated with their accepted offer, when controlling for the Big Five. In addition, I also controlled for the player's position in the TG. No significant relationship was observed between Dispositional Greed and Offer Accepted. Furthermore, no significant relationship was observed between the Big Five and Offer Accepted. In contrast to Offer Proposed, the control variable Player did not have a significant relationship with Offer Accepted. Moreover, no interaction effect was observed for Dispositional Greed and Player.

Likewise Hypothesis 1, this contradiction to the literature (Cantiani et al. 2023; McCannon and Stevens, 2017; Seuntjes et al. 2015) might be explained by the weight assigned to the social component in multi-party settings, the varying measurement types, and statistical power. However, the latter explanation was not supported by the exploratory analysis denoted in the results section. Meaning, statistical power is not a valid explanation, or the sample size was still too small to detect an effect.

## **Hypothesis 3**

In Hypothesis 3, I hypothesized that the association between the bargainer's level of dispositional greed and their proposed offer in coalition bargaining is not significantly different from the association between the bargainer's level of dispositional greed and their accepted offer

in coalition bargaining. Since no association was found between the bargainer's level of dispositional greed and their bargaining behavior, I was unable to test this hypothesis.

# **Theoretical Implications**

The results of my master thesis have several theoretical implications. Firstly, my findings advance insights on the difference between two-party and multi-party settings. By means of this master thesis I wanted to contribute to the discussion of the generalizability of previous results in two-party negotiation settings to multi-party negotiation settings. In two-party settings, the bargainer's level of dispositional greed affects their coalition bargaining behavior (Seuntjes et al., 2015). However, in a multi-party setting it appears the bargainer's level of dispositional greed does not affect their bargaining behavior. Therefore, one could argue that the insights on two-party settings cannot be generalized to multi-party settings.

Secondly, in contrast to two-party settings, theories on payoff allocation in coalition bargaining neglect the effect of the bargainer's personality on payoff allocation. Yet, although the effect is small, personality did influence coalition bargaining behavior (i.e., Offer Proposed) as shown by the exploratory analysis. Therefore, one could argue the silence of coalition theories on payoff allocation about personality is erroneous.

Thirdly, according to the coalition theories on payoff allocation, bargainers often demand a payoff which is proportional to their resources (i.e., Minimum Resource Theory; Gamson, 1964), or bargainers demand a proportional share of the payoff when they have an advantage in resources, while they demand an equal share of the payoff when they have a disadvantage in resources (i.e., Bargaining Theory; Komorita & Chertkoff, 1973). These theories are in line with my findings, as the bargainer's resources (i.e., control variable Player), are positively related with their proposed offer. Nevertheless, the results do not support the Minimum Power Theory

(Gamson, 1964), which suggests participants of coalition bargaining base their demanded payoff on the power they hold. Based on the Minimum Power Theory combined with the Strength-Is-Weakness effect (Caplow, 1956), it would be expected that the bargainer's resources (i.e., control variable Player) are negatively associated with their offer proposed. Therefore, one could argue that the Minimum Resource Theory and Bargaining Theory are better explanations of payoff allocation in coalition bargaining than the Minimum Power Theory.

## **Practical Implications**

Bases on the exploratory analyses it is shown that personality does play a role in coalition bargaining behavior. However, the influence of personality on coalition bargaining behavior is very small compared to the influence of the bargainer's resources on coalition bargaining behavior. Implying, existing theories on payoff allocation in coalition bargaining (i.e., Minimum Resource Theory and Bargaining Theory) offer good predictions regarding the outcome of the negotiation. Hence, organizations should focus mainly on how they set up the parameters of multi-party negotiations, and less on individual differences of potential bargainers.

#### Limitations

Naturally, my master thesis has some limitations. In contrast to the evidence provided by Seuntjes et al. (2015), the LISS data has been collected at various moments in time. Specifically, the level of dispositional greed of the participant was measured three years before the coalition bargaining behavior of the participant was registered (i.e., 2019 vs. 2022). Therefore, the results presented in the current study might have been subject to time effects. Furthermore, I only examined accepted offers when measuring Offer Accepted, which allowed for a monetary comparison to test Hypothesis 3. However, this decision drastically reduced the power of the test, due to the heavily reduced sample size. Moreover, I was unable to test Hypothesis 3 since

no associations were found between the bargainer's level of dispositional greed and their proposed offer nor their accepted offer. In addition, the control variables of this study were problematic. Firstly, the reliability of the measure of Openness was considered insufficient. Secondly, the majority of control variables were not significantly related to the dependent variable(s).

#### **Future Research**

Future research should first address the main limitation of the present study, before conducting follow-up research of the present study. The main limitation to address in future research is the possible effects of time. This limitation could be addressed by conducting a replication study in which dispositional greed and bargaining behavior is measured directly after each other for half of the sample and measured with time in between for the other half of the sample. Furthermore, the relationships should be examined in two-party settings, as well as multi-party settings. This replication study will allow for a thorough comparison regarding time effects, and differences in social context. A complete list of all relationships that should be examined in the replication study is presented in Table 6.

Table 6.Replication Study

Independent Variable	Dependent Variable	Negotiation Setting	Time of Measurement
Dispositional Greed	Offer Proposed	two-party setting	combined
Dispositional Greed	Offer Proposed	two-party setting	separate
Dispositional Greed	Offer Accepted	two-party setting	combined
Dispositional Greed	Offer Accepted	two-party setting	separate
Dispositional Greed	Offer Proposed	multi-party setting	combined
Dispositional Greed	Offer Proposed	multi-party setting	separate

Independent Variable	Dependent Variable	Negotiation Setting	Time of Measurement
Dispositional Greed	Offer Accepted	multi-party setting	combined
Dispositional Greed	Offer Accepted	multi-party setting	separate

## Conclusion

To conclude, the present study has examined the relationship between dispositional greed and coalition bargaining behavior. No significant relationship was found between dispositional greed and offer proposed, nor dispositional greed and offer accepted in coalition bargaining.

These results vary from previous research in two-party settings. Researchers should take these results into consideration when generalizing results of two-party settings to multi-party settings.

Future research includes addressing the limitation of time effects by means of a replication study.

#### References

- Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-Practice Recommendations for Defining, Identifying, and Handling Outliers. *Organizational Research Methods*, *16*(2), 270–301. https://doi.org/10.1177/1094428112470848
- Bazerman, M. H., Curhan, J. R., Moore, D. A., & Valley, K. L. (2000). Negotiation. *Annual Review of Psychology*, 51(1), 279–314. https://doi.org/10.1146/annurev.psych.51.1.279
- Cantiani, A., Beest, I. van, Cruijssen, F., Kant, G., & Erle, T. M. (2023). *Perspective-Taking Predicts Succes in Coalition Formation*. https://osf.io/6dvsa/
- Caplow, T. (1956). A Theory of Coalitions in the Triad. *American Sociological Review*, 21(4), 489–493. https://doi.org/10.2307/2088718
- Centerdata. (2024). Data Archive | Pages. https://www.dataarchive.lissdata.nl/
- Chen, D. L., Schonger, M., & Wickens, C. (2016). oTree—An open-source platform for laboratory, online, and field experiments. *Journal of Behavioral and Experimental Finance*, 9(1), 88–97. https://doi.org/10.1016/j.jbef.2015.12.001
- De Dreu, C. K. W., & Carnevale, P. J. (2003). Motivational Bases of Information Processing and Strategy in Conflict and Negotiation. In *Advances in experimental social psychology, Vol.*35 (pp. 235–291). Elsevier Academic Press. <a href="https://doi.org/10.1016/S0065-2601(03)01004-9">https://doi.org/10.1016/S0065-2601(03)01004-9</a>
- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers.

  \*Professional Psychology: Research and Practice, 40(5), 532–538.

  https://doi.org/10.1037/a0015808
- Gamson, W. A. (1961). A Theory of Coalition Formation. *American Sociological Review*, 26(3), 373–382. https://doi.org/10.2307/2090664

- Gamson, W. A. (1964). Experimental Studies of Coalition Formation. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 1, pp. 81–110). Academic Press. <a href="https://doi.org/10.1016/S0065-2601(08)60049-0">https://doi.org/10.1016/S0065-2601(08)60049-0</a>
- Goldman, M. (2008). Why is multiple testing a problem? In *Bioeng C141—Statistics for Bioinformatics*. University of California.
- Hulin, C., Netemeyer, R., & Cudeck, R. (n.d.). Can a Reliability Coefficient Be Too High? *Journal of Consumer Psychology*, 10(1), 55–58. https://doi.org/10.2307/1480474
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986). Fairness and the Assumptions of Economics. *The Journal of Business*, *59*(4), S285–S300.
- Komorita, S. S. (1974). A weighted probability model of coalition formation. *Psychological Review*, 81(3), 242–256. <a href="https://doi.org/10.1037/h0036449">https://doi.org/10.1037/h0036449</a>
- Komorita, S. S., & Chertkoff, J. M. (1973). A bargaining theory of coalition formation.

  \*Psychological Review, 80(3), 149–162. https://doi.org/10.1037/h0034341
- Lewicki, R. J., Saunders, D. M., & Barry, B. (2006). Negotiation. McGraw-Hill Irwin.
- Madley-Dowd, P., Hughes, R., Tilling, K., & Heron, J. (2019). The proportion of missing data should not be used to guide decisions on multiple imputation. *Journal of Clinical Epidemiology*, *110*(1), 63–73. https://doi.org/10.1016/j.jclinepi.2019.02.016
- McCannon, B. C., & Stevens, J. (2017). Role of personality style on bargaining outcomes. *International Journal of Social Economics*, 44(9), 1166–1196. <a href="https://doi.org/10.1108/IJSE-01-2015-0008">https://doi.org/10.1108/IJSE-01-2015-0008</a>
- Mussel, P., Rodrigues, J., Krumm, S., & Hewig, J. (2018). The convergent validity of five dispositional greed scales. *Personality and Individual Differences*, *131*(1), 249–253. https://doi.org/10.1016/j.paid.2018.05.006

- Myers, I. B. (1962). *The Myers-Briggs Type Indicator: Manual (1962)* (pp. ii, 110). Consulting Psychologists Press. <a href="https://doi.org/10.1037/14404-000">https://doi.org/10.1037/14404-000</a>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed). McGraw-Hill. http://catdir.loc.gov/catdir/toc/mh022/93022756.html
- Polzer, J. T., Mannix, E. A., & Neale, M. A. (1998). Interest Alignment and Coalitions in Multiparty Negotiation. *Academy of Management Journal*, 41(1), 42–54. https://doi.org/10.5465/256896
- Ray, D., & Vohra, R. (2015). Coalition Formation. In *Handbook of Game Theory with Economic Applications* (Vol. 4, pp. 239–326). Elsevier. <a href="https://doi.org/10.1016/B978-0-444-53766-9.00005-7">https://doi.org/10.1016/B978-0-444-53766-9.00005-7</a>
- Seo, S. (2006). A Review and Comparison of Methods for Detecting Outliers in Univariate Data Sets. 1.
- Seuntjens, T. G., Zeelenberg, M., van de Ven, N., & Breugelmans, S. M. (2015). Dispositional greed. *Journal of Personality and Social Psychology*, 108(6), 917–933. https://doi.org/10.1037/pspp0000031
- Seuntjens, T. G., Zeelenberg, M., van de Ven, N., & Breugelmans, S. M. (2019). Greedy bastards: Testing the relationship between wanting more and unethical behavior. *Personality and Individual Differences*, *138*(1), 147–156. <a href="https://doi.org/10.1016/j.paid.2018.09.027">https://doi.org/10.1016/j.paid.2018.09.027</a>
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups* (pp. xiii, 313). John Wiley.
- Van Beest, I., & Van Dijk, E. (2007). Self-interest and fairness in coalition formation: A social utility approach to understanding partner selection and payoff allocations in groups.

- European Review of Social Psychology, 18(1), 132–174. https://doi.org/10.1080/10463280701595354
- van Veenen, J., & Prakken, H. (2006). A Protocol for Arguing About Rejections in Negotiation.

  In S. Parsons, N. Maudet, P. Moraitis, & I. Rahwan (Eds.), *Argumentation in Multi-Agent Systems* (Vol. 1, pp. 138–153). Springer. <a href="https://doi.org/10.1007/11794578\_9">https://doi.org/10.1007/11794578\_9</a>
- Wissink, J., van Beest, I., Pronk, T., & van de Ven, N. (2022a). Strength Is Still a Weakness in Coalition Formation: Replicating and Understanding the Strength-Is-Weakness Effect.

  \*Personality and Social Psychology Bulletin, 48(2), 283–296.

  https://doi.org/10.1177/01461672211005883
- Wissink, J., van Beest, I., Pronk, T., & van de Ven, N. (2022b). The Online Coalition Game: A tool for online interactive coalition formation research. *Behavior Research Methods*, *54*(3), 1078–1091. <a href="https://doi.org/10.3758/s13428-021-01591-9">https://doi.org/10.3758/s13428-021-01591-9</a>
- Ypofanti, M., Zisi, V., Zourbanos, N., Mouchtouri, B., Tzanne, P., Theodorakis, Y., & Lyrakos,
   G. (2015). Psychometric Properties of the International Personality Item Pool Big-Five
   Personality Questionnaire for the Greek population. *Health Psychology Research*, 3(2),
   2206. https://doi.org/10.4081/hpr.2015.2206

# **Appendix A: General Documents**

#### Attachment A.1.

Ethical Approval by the Ethics Review Board of Tilburg University



SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

ETHICS REVIEW BOARD

Department of Social Psychology Dr. Tinne Vander Elst

Date Dear Dr. Tinne Vander Elst,

13/11/2023 The Ethics Review Board has reviewed your research project. The board has identified no ethical and legal objections to research project titled Bulk proposal

for the Department of Social Psychology.

Review research project
This advice concerns for the duration of the project, from 05/09/2023 until

10/09/2026. If changes are made to the research project, the researcher needs to

Date of your submission submit an amendment for review.

31/10/2023

Reference Sincerely,

TSB\_RP1173
On behalf of the Ethics Review Board,

Muxada Hoy

Telephone

School of Social and Behavioral
Sciences

E-mail

Dr. A. (Alexandra) Hering

erb@tilburguniversity.edu Chair Ethics Review Board

## Attachment A.2.

Pre-registration via AsPredicted supported by Wharton Credibility Lab, University of Pennsylvania

# 1) Have any data been collected for this study already?

It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid pre-registration nevertheless.

# 2) What's the main question being asked or hypothesis being tested in this study?

How does dispositional greed influence coalition bargaining behavior?

H1: Dispositional greed is negatively associated with offer proposed in coalition bargaining.

H2: Dispositional greed is positively associated with offer accepted in coalition bargaining.

H3: The association between dispositional greed and offer proposed is not significantly different from the association between dispositional greed and offer accepted in coalition bargaining.

# 3) Describe the key dependent variable(s) specifying how they will be measured.

The dependent variables are Offer Proposed and Offer Accepted, during the Transport Game. Both will be measured as the proportion of the total available payoff in the opening offer.

# 4) How many and which conditions will participants be assigned to?

During the Transport Game, participants are assigned to one of the three conditions. Company A, B, or C, which all differ in resources.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

**Hypotheses Testing** 

H1. (Multi)linear Regression Analysis (block entry)

Offer Proposed = b0 + b1DispositionalGreed

Offer Proposed = b0 + b1DispositionalGreed + b2Opennesses + b3Conscientiousness +

b4Extraversion + b5Agreeableness + b6Neuroticism

H2. (Multi)linear Regression Analysis (block entry)

Offer Accepted = b0 + b1DispositionalGreed

Offer Accepted = b0 + b1DispositionalGreed + b2Opennesses + b3Conscientiousness +

b4Extraversion + b5Agreeableness + b6Neuroticism

H3. Comparing the 95% confidence intervals of standardized regression coefficients

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

All data will be standardized in the form of Z-scores. Z-scores < -3 or Z-scores > 3 will be considered outliers (Seo, 2006). Outliers will be removed from the sample (Aguinis et al., 2013). Furthermore, the percentage of missing data may not exceed 10% (Madley-Dowd et al., 2019). In case the percentage of missing data does exceed 10%, the participants concerned will be removed from the sample.

7) How many observations will be collected or what will determine sample size?

No need to justify decision, but be precise about exactly how the number will be

determined.

A priori power analysis has been performed, as the data has not been accessed yet. The results

indicated a required sample size of 191, in order to correctly test one hypothesis (r = .2, power =

.8,  $\alpha = .05$ ; Ferguson, 2009). However, since multiple hypotheses will be tested a Bonferonni

correction was applied to the priori power analysis (i.e.,  $\alpha = .05/n$ ; Goldman, 2008). The results

indicated a required sample size of 231, in order to correctly test Hypothesis 1 and Hypothesis 2

 $(r = .2, power = .8, \alpha = .025).$ 

8) Anything else you would like to pre-register?

(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses

planned?)

The present study makes use of archival data provided by the Longitudinal Internet studies for

Social Sciences (LISS) panel. The LISS panel exists since 2007 and is managed by the non-profit

research institute Centerdata (Tilburg University, the Netherlands). The LISS panel is perfectly

suited for research where a valid representation of the Dutch population is of great importance.

The LISS panel is based on a true probability sample of Dutch households, drawn from the

household register by Statistics Netherlands. The data has not yet been accessed.

Created: 02/16/2024

# **Appendix B: LISS panel**

#### Attachment B.1.

Statement Concerning the Use of Data of the LISS panel



The undersigned hereby undertakes to carry out work on the data of the LISS panel or immigrant panel, in accordance with the following conditions:

- 1. He/she undertakes to keep confidential any information in the data concerning individual persons, households, enterprises or institutions which comes to his/her knowledge during the work on the data.
- 2. He/she undertakes not to distribute data of the LISS panel or immigrant panel to others without permission from Centerdata.
- 3. He/she undertakes to use the data for scientific or policy relevant (i.e. noncommercial) research only.
- 4. He/she does not use the data in a paid assignment for a third party without payment to and written permission from Centerdata.
- 5. He/she provides a copy of all publications based on the data to Centerdata (https://statements.centerdata.nl/contact) and includes the following acknowledgement:

  "In this paper we make use of data of the LISS (Longitudinal Internet Studies for the Social sciences) panel administered by Centerdata (Tilburg University, The Netherlands)."
- 6. This statement shall remain valid, even after conclusion of the work on the data.

First name: Marleen

Last name: Pijnenburg

Email address: m.h.m.pijnenburg@tilburguniversity.edu

**Affiliation:** Tilburg University

**Department:** N/A

Position: Student

Country: Netherlands

**Signature:** 

Date: 13 February, 2024

M. Pyrarburg

This statement was completed on website https://statements.centerdata.nl. For any questions please use the contact form.

## Attachment B.2.

Response Information LISS panel Dispositional Greed

Selected number of household members: 3,406 (100%)

Non-response: 989 ( 29.0%)

Response: 2,417 (71.0%)

Complete: 2,367 ( 69.5%)

Incomplete: 50 ( 1.5%)

Date of data collection: May 2019

# Attachment B.3.

Response Information LISS panel Coalition Bargaining Behavior

Selected number of household members: 5,159

Response: 3,263 (63.2%)

Non-response: 1,896 (36.8%)

Accepted invitation to participate: 1,394 (42.7%)

Participated: 1,148 (82.4%)

Date of data collection: July, August 2022

# Attachment B.4.

Response Information LISS panel Personality

Selected number of household members: 7,136 (100.0%)

Non-response: 1,300 (18.2%)

Response: 5,836 (81.8%)

Complete: 5,788 (81.1%)

Incomplete: 48 (0.7%)

Date of data collection: May, June 2022

# **Appendix C: Measures**

#### Attachment C.1

7- Item Dispositional Greed Scale by Seuntjes et al. (2015)

Please indicate the extent to which you agree or disagree with each statement (1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree).

- I always want more.
- Actually, I'm kind of greedy.
- One can never have too much money.
- As soon as I have acquired something. I start to think about the next thing I want.
- It doesn't matter how much I have. I'm never completely satisfied.
- My life motto is "more is better.".
- I can't imagine having too many things.

## **Attachment C.2**

50-Item IPIP Big Five Inventory by Goldberg (1999)

Please indicate how accurately do the statements below describe you 1 = very inaccurate, 2 = moderately inaccurate, 3 = Neither inaccurate nor accurate, 4 = moderately accurate, 5 = somewhat accurate).

- I am the life of the party.
- I feel little concern for others.
- I am always prepared.
- I get stressed out easily.

- I have a rich vocabulary.
- I don't talk a lot.
- I am interested in people.
- I leave my belongings around.
- I am relaxed most of the time.
- I have difficulty understanding abstract ideas.
- I feel comfortable around people.
- I insult people.
- I pay attention to details.
- I worry about things.
- I have a vivid imagination.
- I keep in the background.
- I sympathize with others' feelings.
- I make a mess of things.
- I seldom feel blue.
- I am not interested in abstract ideas.
- I start conversations.
- I am not interested in other people's problems.
- I get chores done right away.
- I am easily disturbed.
- I have excellent ideas.
- I have little to say.
- I have a soft heart.

- I often forget to put things back in their proper place.
- I get upset easily.
- I do not have a good imagination.
- I talk to a lot of different people at parties.
- I am not really interested in others.
- I like order.
- I change my mood a lot.
- I am quick to understand things.
- I don't like to draw attention to myself.
- I take time out for others.
- I shirk my duties.
- I have frequent mood swings.
- I use difficult words.
- I don't mind being the center of attention.
- I feel others' emotions.
- I follow a schedule.
- I get irritated easily.
- I spend time reflecting on things.
- I am quiet around strangers.
- I make people feel at ease.
- I am exacting in my work.
- I often feel blue.
- I am full of ideas.

# **Appendix D: Figures**

**Figure D.1.**Normal Q-Q Plot Offer Proposed

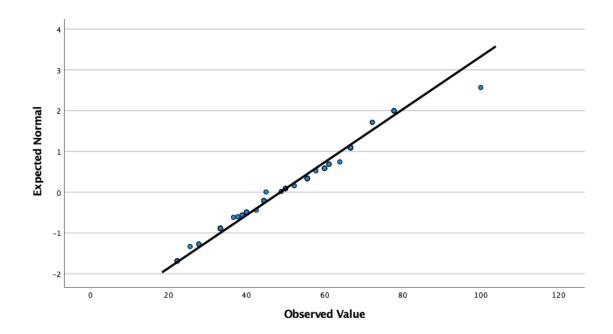
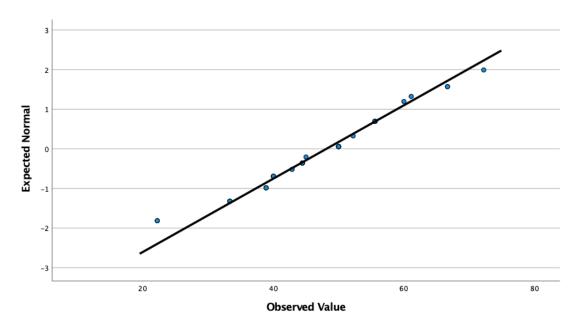
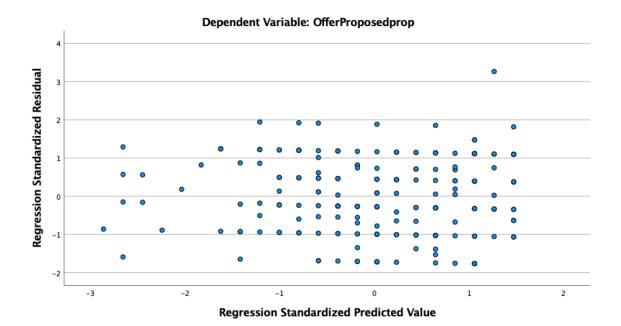


Figure D.2.

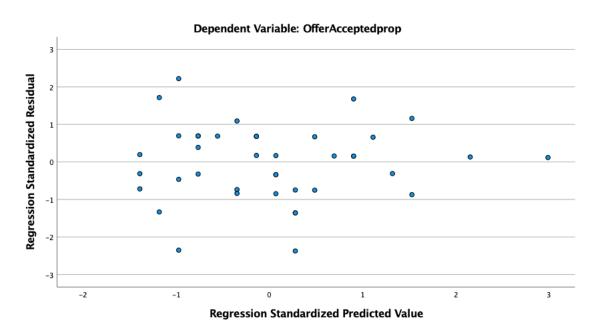
Normal Q-Q Plot Offer Accepted



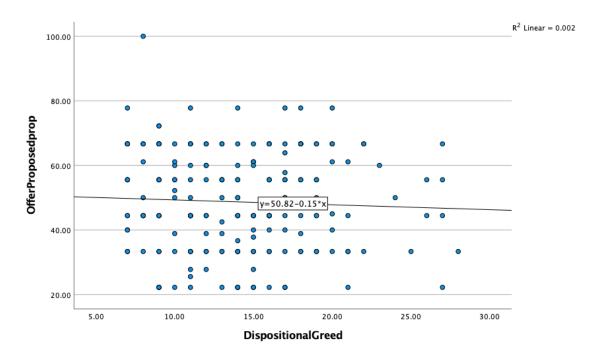
**Figure D.3.**Scatterplot of Residuals Offer Proposed



**Figure D.4.**Scatterplot of Residuals Offer Accepted



**Figure D.5.**Scatterplot Dispositional Greed and Offer Proposed



**Figure D.6.**Scatterplot Dispositional Greed and Offer Accepted

